

17

affixing structure interface ("lug interface") of an electronic device that is configured to also couple the electronic device to an attachment member, such as a band. Conductors of the connector may electrically connect to the electronic device when the affixing structure is attached, facilitating electrical communication between the electronic device and another electronic device using the connector. This electrical communication may enable a variety of different interactions with the electronic device, such as obtaining data from the electronic device, transferring data to the electronic device, obtaining diagnostic information from the electronic device, instructing the electronic device to perform various actions such as running diagnostic tests, and so on.

In some embodiments, an attachment member may include one or more electronic components and spring pins or other conductors. For example, inserting an affixing structure of a band or band segment to a channel of a wearable device may electrically connect spring pins of the band affixing structure to the wearable device, thereby electrically connecting the electronic component of the band or band segment to the electronic component of the wearable device. In some embodiments, the attachment member may additionally include a connector operable to connect the wearable device to another electronic device. Such connection may allow transfer of power and/or communications between the attachment member and the electronic device and/or between the wearable device and the electronic device via the attachment member.

In the present disclosure, the methods disclosed may be implemented utilizing sets of instructions or software readable by a device. Further, it is understood that the specific order or hierarchy of steps in the methods disclosed are examples of sample approaches. In other embodiments, the specific order or hierarchy of steps in the method can be rearranged while remaining within the disclosed subject matter. The accompanying method claims present elements of the various steps in a sample order, and are not necessarily meant to be limited to the specific order or hierarchy presented.

The described disclosure may utilize a computer program product, or software, that may include a non-transitory machine-readable medium having stored thereon instructions, which may be used to program a computer system (or other electronic devices) to perform a process according to the present disclosure such as a computer controlled manufacturing process. A non-transitory machine-readable medium includes any mechanism for storing information in a form (e.g., software, processing application) readable by a machine (e.g., a computer). The non-transitory machine-readable medium may take the form of, but is not limited to, a magnetic storage medium (e.g., floppy diskette, video cassette, and so on); optical storage medium (e.g., CD-ROM); magneto-optical storage medium; read only memory (ROM); random access memory (RAM); erasable programmable memory (e.g., EPROM and EEPROM); flash memory; and so on.

It is believed that the present disclosure and many of its attendant advantages will be understood by the foregoing description, and it will be apparent that various changes may be made in the form, construction and arrangement of the components without departing from the disclosed subject matter or without sacrificing all of its material advantages. The form described is merely explanatory, and it is the intention of the following claims to encompass and include such changes.

While the present disclosure has been described with reference to various embodiments, it will be understood that

18

these embodiments are illustrative and that the scope of the disclosure is not limited to them. Many variations, modifications, additions, and improvements are possible. More generally, embodiments in accordance with the present disclosure have been described in the context or particular embodiments. Functionality may be separated or combined in blocks differently in various embodiments of the disclosure or described with different terminology. These and other variations, modifications, additions, and improvements may fall within the scope of the disclosure as defined in the claims that follow.

We claim:

1. An electronic band for a wearable device, the electronic band comprising:

a first band segment including a first affixing structure configured to couple the first band segment to the wearable device when inserted into a first channel of the wearable device, a processing unit, and a first electrical connector having a plurality of contact pins at least some of which are electrically connected to the processing unit;

wherein the first electrical connector electrically connects the processing unit of the first band segment to a second electronic component positioned within the wearable device when the first affixing structure is inserted into the first channel.

2. The electronic band of claim 1 further comprising a second band segment including a second affixing structure configured to couple the second band segment to the wearable device when inserted into a second channel of the wearable device.

3. The electronic band of claim 2 wherein the first affixing structure is a first lug and the second affixing structure is a second lug.

4. The electronic band of claim 3 further comprising a clasp that couples the first band segment to the second band segment.

5. The electronic band of claim 3 wherein each of the first and second lugs includes a watch interfacing end, a band interfacing end, first and second arms that extend from the watch interfacing end towards the band interfacing end, and a pin that extends between the first and second arms at the band interfacing end.

6. The electronic band of claim 1 wherein the first band segment further includes a second connector electrically coupled to the processing unit of the first band segment.

7. The electronic band of claim 6 wherein the first band segment has first and second ends with the first affixing structure coupled to the first band segment at the first end and the second connector positioned near the second end.

8. The electronic band of claim 2 wherein the first band segment further comprises a memory.

9. The electronic band of claim 2 wherein the plurality of contact pins are centered along a width of the affixing structure.

10. The electronic band of claim 9 wherein the plurality of pins consist of six pins spaced apart from each other and arranged along a single row.

11. The electronic band of claim 9 wherein each of the plurality of contact pins is a spring loaded pin.

12. An electronic band for a wearable device, the electronic band comprising:

a first band segment including a first lug configured to couple the first band segment to the wearable device when inserted into a first channel of the wearable device, a first flexible strap coupled to the first lug, a processing unit positioned within the first strap, a first